

## NMPRC EFFICIENT USE OF ENERGY RULE, 17.7.2.13 NMAC

## EL PASO ELECTRIC COMPANY'S ANNUAL REPORT FOR ENERGY EFFICIENCY PROGRAMS CALENDAR YEAR 2011

**JUNE 1, 2012** 

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# **Exhibits**

EXHIBIT A: 2011 STATEWIDE EVALUATOR MEASUREMENT AND VALUATION ("M&V")

**REPORT** 

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## Introduction

El Paso Electric ("EPE") submits this annual report on the Energy Efficiency Programs ("Programs") for calendar year 2011. EPE's initial Programs were approved by the New Mexico Public Regulation Commission ("NMPRC" or "Commission") in NMPRC Case No. 07-00411-UT, and additional Programs and modifications were approved in NMPRC Case No. 09-00390-UT. EPE's most recent Program additions and modifications were approved by the Commission on February 21, 2012in NMPRC Case No. 11-00047-UT. A brief description of EPE's approved Programs is provided below.EPE has presented the Programs to matchthe presentation in the annual Measurement and Verification ("M&V") Report by ADM Associates, Inc. ("ADM"), the Commission's independent evaluator.EPE's report covers the requirements set forth in the Commission's Efficient Use of Energy Rule ("Rule") 17.7.2 NMAC, including all costs incurred in the research, development and implementation of EPE's programs, from January 1, 2011 through December 31, 2011.

#### **Residential High Efficiency Cooling Program**

The Residential High Efficiency Cooling Program offers residential customers a rebate (\$300 or \$500) for highly efficient evaporative coolers, which is an alternative to refrigerated air conditioning. Residential customers that purchase refrigerated AC systems can also receive rebates (\$200 - \$600) for purchasing highly efficient systems. The outreach is administered by internal EPE personnel. Frontier Associates administers the rebate process for this program.

#### **NM Energy Saver Program**

The NM Energy Saver Program offers income qualifying customers a variety of energy efficiency measures. Green Works NM implements and manages this program. Frontier Associates administers and tracks the results of the program.

#### NM Energy Saver CFL Program

The NM Energy Saver CFL Program offers income qualifying customers CFLs. The CFLs are offered in conjunction with the replacement of refrigerators under the NM Energy Saver Program.

For M&V reporting purposes, ADM combined the NM Energy Saver CFL Program with the NM Energy Saver Program and referenced this program as the NM Energy Saver Program.

#### **Living Wise Program**

The Living Wise Program is an educational program that targets Fifth Grade students. Students receive a kit of energy and water efficient devices for installation at home. EPE contracts with Resource Action Programsto implement and manage this program.

## ResidentialHome Efficiency Program

The Residential Home Efficiency Program offers residential customers rebates on the following measures:

Ceiling, Wall, and Floor Insulation

Duct Sealing
Air Infiltration
Solar Screens
Energy Star Windows

The outreach is administered by internal EPE personnel. Frontier Associates administers the rebate process for this program.

#### **Residential CFL Program**

The Residential CFL Programs offers residential customers free CFLs through a giveaway process. The outreach and administration of this program is administered by internal EPE personnel.For M&V reporting purposes, ADM has referenced the Residential CFL Program as the CFL Distribution Program.

## **Appliance Recycling Program**

The Appliance Recycling Program offers residential customers small incentives to allow EPE to remove and recycle second refrigerators and freezers. EPE contracts with a third party, JACO Environmental, to implement and manage this program.

#### **Energy Star New Homes Program**

The Energy Star New Homes Program offers rebates to builders for construction of new homes that exceed current building standards by a minimum of 15%. The program provides tiered rebates of \$250, \$500, or \$750 for homes based upon the Home Energy Rater Scoring. The program is offered jointly with New Mexico Gas Company, with the two companies splitting the rebate payment in instances of Energy Star-rated homes that have gas space heating in areas within both companies' service territories. EPE contracts with a third party, ICF International, to implement and manage this program.

#### School & Business Assistance Program (SCORE Plus)

The SCORE Plus Program offers outreach services and rebates and incentives to businesses, school districts and governmententities to implement a range of energy efficiency measures, including lighting, cooling, motors and building envelope improvements. EPE contracts with CLEAResult, which actively recruits schools, government entities and businesses; provides consulting services identifying the improvements that can be made at customers' facilities; and assists in the rebate application process.

## **Commercial Lighting Program**

The Commercial Lighting Program provides commercial and industrial customers with rebates and incentives for energy efficient lighting retrofits and new construction applications. The outreach is administered by internal EPE personnel. Frontier Associates administers and tracks the results of this program.

#### **Commercial Cooling Program**

The Commercial Cooling Program provides commercial and industrial customers with rebates and incentives for the installation of high efficiency cooling equipment. The outreach is

administered by internal EPE personnel. Frontier Associates administers and tracks the results of this program. For M&V reporting purposes, ADM has combined the Commercial Cooling Program into the Commercial Cooling and Motors Program.

## **Commercial Motors Program**

The Commercial Motors Program provides commercial and industrial customers with rebates and incentives for the installation of high efficiency motors and motor drive equipment. The outreach is administered by internal EPE personnel. Frontier Associates administers and tracks the results of this program. For M&V reporting purposes, ADM has combined the Commercial Motors Program into the Commercial Cooling and Motors Program.

## **Commercial TES Program**

The Commercial TES Program provides commercial and industrial customers an incentive for the installation of thermal energy storage equipment. The outreach is administered by internal EPE personnel. Frontier Associates administers and tracks the results of this program. For M&V reporting purposes, ADM has combined the Commercial TES Programintothe Commercial Cooling and Motors Program.

#### **Commercial Cool Roofs Program**

The Commercial Cool Roofs Program provides commercial and industrial customers with rebates and incentives for the installation of cool roofs in retrofit applications. The outreach is administered by internal EPE personnel. Frontier Associates to administer and track the results of this program. For M&V reporting purposes, ADM has combined the Commercial Cool Roofs Program into the Commercial Building Envelope Program.

#### **Commercial Window Film Program**

The Commercial Window Film Program provides commercial and industrial customers with rebates and incentives for the installation of window film in retrofit applications. The outreach is administered by internal EPE personnel. Frontier Associates to administer and track the results of this program. For M&V reporting purposes, ADM has combined the Commercial Window Film Program into the Commercial Building Envelope Program.

## **Commercial Solar Screens Program**

The Commercial Solar Screens Program provides commercial and industrial customers with an incentive for the installation of solar screens in retrofit applications. The outreach is administered by internal EPE personnel. Frontier Associates administersandtracks the results of this program. For M&V reporting purposes, ADM has combined the Commercial Solar Screens Program into the Commercial Building Envelope Program.

#### **Commercial Custom Efficiency Program**

The Commercial Custom Efficiency Program (CCEP) offers commercial and industrial customers incentivesto implement energy efficiency projects that fall outside the scope of the other commercial program offerings. This includes a variety of special lighting and industrial process measures as well as compressed air, refrigeration, and pumping. The outreach is

administered by internal EPE personnel. of this program.	Frontier Associates administers and tracks the results

# **Energy Efficiency Rule Reporting Requirements**

Pursuant to the Commission's Rule, EPE's annual report for 2011 addresses the following information:

- 1. The most recent M&V report of the independent evaluator;
- 2. A statement of Program-related expenditures;
- 3. A statement of EPE's budgeted expenditures that were not spent during 2011;
- 4. A discussion of any material variance in any projected total Program costs together with an explanation for any variances;
- 5. A reconciliation of EPE's tariff rider collections from 2011;
- 6. Documentation and information for each Program implemented in 2011;
- 7. A description of non-energy benefits of EPE's portfolio of Programs, including emissions reductions;
- 8. Information on the number of customers applying for and participation in self-direct programs and related information.

# **M&V** Report of Independent Evaluator

The Measurement and Verification Report for EPE's2011Energy Efficiency Programs is included as Exhibit A of this document. EPE is in the process of reviewing the results, conclusions and recommendations contained in this report.

# 2011 Report

## **Program-Related Expenditures**

All program-related expenditures included in the independent M&V report are presented in Table 1 which follows.

**Table 1: 2011 Program Expenditures** 

		Incent	tives	Admini	strative	Direct			
Program	2011 Budget	Customer	Third Party	Direct	Third Party	Program Marketing	Program Development	M&V	Total Costs
Living Wise	\$ 130,860	\$ 0	\$ 131,180	\$ 11,330	\$ 0	\$ 0	\$ 0	\$ 11,169	\$ 153,679
Residential Home Efficiency	60,454	18,740	0	3,450	0	0	0	19,998	42,188
Residential High Efficiency Cooling	521,414	484,276	0	25,544	0	452	430	15,130	525,832
Residential CFL	150,000	108,751	0	8,979	0	17,480	0	0	135,210
NM Energy Saver <sup>(1)</sup>	506,407	416,428	7,412	71,742	0	0	0	7,920	503,502
Appliance Recycling	141,217	28,358	0	4,534	53,023	12,712	0	4,844	103,471
Energy Star New Homes	213,238	85,038	0	12,567	77,899	0	0	0	175,504
School & Business Assistance	500,890	274,621	48,750	25,279	198,617	0	0	29,568	576,835
Commercial Lighting	759,368	832,710	0	48,931	0	0	2,721	37,917	922,279
Commercial Cooling, Motors and TES <sup>(2)</sup>	282,568	13,384	0	1,975	0	0	0	12,355	27,714
Commercial Building Envelope <sup>(3)</sup>	101,092	12,374	0	2,570	55	0	861	7,045	22,905
Commercial Custom Efficiency	0	0	0	0	0	0	0	0	0
General Advertising & Marketing	0		0	0	0	24,351	0	0	24,351
Total	\$ 3,367,508	\$ 2,274,680	\$ 187,342	\$ 216,901	\$ 329,594	\$ 54,995	\$ 4,012	\$ 145,946	\$ 3,213,470

<sup>(1)</sup> The NM Energy Saver CFL Program approved in 11-00047-UT has been combined by ADM into the NM Energy Saver Program for M&V reporting purposes.

<sup>(2)</sup> The Commercial Cooling Program, Commercial Motors program and the Commercial TES Program approved in 11-00047-UT have been combined by ADM into the Commercial Cooling and Motors Program for M&V reporting purposes.

<sup>(3)</sup> The Commercial Cool Roofs Program, Commercial Window Film Program and the Commercial Solar Screens Program approved in 11-00047-UT have been combined by ADM into the Commercial Building Envelope Program for M&V reporting purposes.

## **Budgeted Funds Not Spent in Program Year 2011**

EPE's 2011 budget was initially approved in NMPRC Case No. 09-00390-UT, and thereafter was modified by the Commission in Case No. 11-00047-UT.EPE incurred Program costs of \$3,213,470, compared to its 2011 Budget of \$3,367,508. EPE did not spend \$650,412of its 2011budget, or 17%.

EPE's approved budgets for calendar year 2011arebroken down into the following categories for each Program: "Incentives", "Administration," "Marketing," "Program Development" and "M&V". The category for "Incentives" includes customer and third-party incentives; the category for "Administration" includes direct administrative costs and third party administrative costs. Table 2 below compares the 2011 Budget vs. Actual Expenditures based on these categories.

Actual incentive/rebate expenditures were 21% less than the budgeted amount, primarily due to low participation in programs by residential and commercial customers. The lack of consistent funding in the Commercial Lighting Program caused some customers and contractors to delay or not to participate in this program.

Administrative expenditures, including direct and third party expenditures totaled96% of the budget.

Marketing expenditures totaled 72% of the budget.

The M&V contractual expenses for ADM are approved by the Commission. M&V Expenditures were 67% over the budget approved in 11-00047-UT. This overage is due to the late contracting of ADM in 2010, causing 2010 M&V work to be performed, and related expenditures to be incurred, in 2011 rather than 2010. By comparison 2010 expenditureswere \$67,921, or 42% of the 2010 M&V budget. The regulatory lag associated with M&V efforts by ADM appears to be of continuing concerns for M&V expenditures and budgets.

Program Development expenditures were primarily for the Lighting Program in order to develop the Lighting Survey Forms.

Table2: Budgeted Funds, Expenditures and Differences by Category

2011							
	20	Actual		%			
Cost Category	Budget*	Expenditures	Difference	Difference			
Incentives	2,636,609	2,462,022	(174,587)	-7%			
Administration	566,405	546,495	(19,910)	-4%			
Marketing	76,901	54,995	(21,906)	-28%			
M&V	87,593	145,946	58,353	67%			
Program Development	0	4,012	4,012	-			
Total	3,367,508	3,213,470	(154,038)	-5%			

<sup>\*</sup> Per Final Order of 11-00047-UT.

## **Material Variances in Program Costs**

Table 3 displays a comparison of 2011 projected program costs and the actual program expenditures in 2011 by program categories. None of EPE's programs exceeded their budgets by more than 25%.

Table3: Budgeted Funds, Expenditures and Differences by Program

	2011							
Program	Budget (Projected Program Costs)		Actual Expenditures		Dollar Difference		% Difference	
Living Wise	\$	130,860	\$	153,679	\$	22,819	17%	
Residential Home Efficiency		60,454		42,188		(18,266)	-30%	
Residential High Efficiency Cooling		521,414		525,832		4,418	1%	
Residential CFL		150,000		135,210		(14,790)	-10%	
NM Energy Saver		506,407		503,502		(2,905)	-1%	
Appliance Recycling		141,217		103,471		(37,746)	-27%	
Energy Star New Homes		213,238		175,504		(37,734)	-18%	
School & Business Assistance		500,890		576,835		75,945	15%	
Commercial Lighting		759,368		922,279		162,911	21%	
Commercial Cooling, Motors and TES		282,568		27,714		(254,854)	-90%	
Commercial Building Envelope		101,092		22,905		(78,187)	-71%	
Commercial Custom Efficiency		0		0		0	-	
General Advertising & Marketing		0		24,351		24,351	-	
Total	\$	3,367,508	\$	3,213,470	\$	(154,038)	-5%	

The material variances greater than ±25% in program costs are explained as follows:

#### **Residential Home Efficiency Program**

This program only had 89 participants, considerably less than was forecasted, despite significant outreach efforts. The lack of participation resulted in reduced program expenditures. Additional outreach efforts in 2012 are intended to bring program expenditure much closer to the 2012program budget.

## **Appliance Recycling Program**

The Appliance Recycling Program was not approved until August 12,2010; therefore the program did not get started until September of 2010. The ramp up time required for this program and the delayed start resulted in a lack of participation in 2010 and the slow start in 2011. There were 717 participants in 2011, approximately 72% of the expected

participants.EPE anticipates this program will be much closer to the goal in 2012 with additional outreachefforts by EPE and the program implementer.

## **Commercial Coolingand Motors Program**

Note: ADM combined the Cooling and Motors Program with the Commercial Cooling Program, Commercial Motors Program and the Commercial TES Program for M&V purposes.

Changes to these programsaimed at increasing participation have beenimplemented, as approved on August 12, 2010 in the Uncontested Stipulation inNMPRC Case No. 09-00390-UT.However, in 2011, there was only one participant in this program. Extra emphasishas been placed on acquiring additional participants in 2012 in the area of variable speed drives. This program is being absorbedinto the Commercial Comprehensive Program in 2012 as approved in Case No. 11-00047-UT.

## **Commercial Building Envelope Program**

Note: ADM combined the Commercial Building Envelope Program with the Commercial Cool Roofs Program, the Commercial Window Film Program and the Commercial Solar Screens Program for M&V purposes.

In 2011, participation increased to three participants, however 34 had been anticipated. Extra emphasis has been placed on attracting additional participating contractors in 2012 in the area of roofing and solar film. This program is being absorbed into the Commercial Comprehensive Program in 2012as approved in Case No. 11-00047-UT.

#### **Tariff Rider Reconciliation**

Table 4 below displays EPE's Energy Efficiency costs, Stipulated Adder and Efficient Use of Energy Recovery through December 31, 2011. The costs recovered through Rate 17- Efficient Use of Energy Cost Recovery Factor, are not otherwise recovered through EPE's base rates.

Table 4:Energy Efficiency Historical Under/(Over) Recovery

Description	Costs	Recovery	Cumulative Balance
2010 Under Recovery Balance			\$ 413,926
2011 Energy Efficiency	\$ 3,213,470	\$ 3,201,173	\$ 426,223
2011 Stipulated Adder, Case No. 11-00047-UT	\$ 832,897		\$ 1,259,120
Total			\$ 1,259,120

EPE has a cumulative under recovery balance of \$1,259,120 for the costs of implementing Energy Efficiency Programs and the recovery of the stipulated adders through December 2011. The under recovered costs illustrated above reflects the stipulated settlement for the incentive/disincentive adder true-up in Case No. 11-00047-UT of \$832,897. The stipulated estimated adder for 2011 was \$1,250,713. The true-up amount for 2011 is based on verified energy and demand savings for the 2011 programs. In accordance with the Partial Stipulation that was approved in part by the Commission in NMPRC Case No.

11-00047-UT, the realized lifetime energy savings for 2011 programs of 167,760,768 kWh were multiplied by \$0.0045 and the realized annual demand savings for 2011 programs of 3,898.7 kW were multiplied by \$20.00, for a totalincentive/disincentive adder for 2011 of \$832,897.

Table 5 shows the monthly reconciliation of the prior calendar year's program cost and Rate 17 -EUERF collections as required by the agreed stipulation to Case No. 11-00047UT.

Table 5: Monthly Reconciliation of the Prior Calendar Year's Program Costs and Rate 17-EUERF Collections.

Month	2011 Actual Costs	2011 Recovery	Under Recovery Balance
Beg. Bal.			413,926
Jan-2011	94,395	192,282	316,039
Feb-2011	99,332	217,090	198,281
Mar-2011	190,240	215,125	173,396
Apr-2011	248,149	220,602	200,943
May-2011	204,075	222,604	182,414
Jun-2011	408,504	323,838	267,080
Jul-2011	382,702	401,808	247,974
Aug-2011	190,993	360,922	78,045
Sep-2011	354,974	360,634	72,385
Oct-2011	236,120	281,151	27,354
Nov-2011	353,882	193,639	187,597
Dec-2011	450,104	211,478	426,223
Total	3,213,470	3,201,173	

For 2012, it is anticipated that EPE's EUERF collection balance will under collect by more than 15% of the 2012 budget. In accordance with the Partial Stipulation, Section 3.d, EPE will file to update the Rate 17 – EUERF for 2012.

## **Program Projections and Results**

Tables 6 through 9 present program specific information, including forecasted savings, actual achieved savings, the number of participants, participant costs, the cost per kWh of saved energy, the economic benefit realized in 2011, and the economic benefits to be expected over the life of the measures. Note that economic benefits are restricted to avoided electricity generation and capacity costs and avoided natural gas costs. The labeling of items (a) through (g) correspond to the items listed in Section 17.7.2.13.C(6). Please see Exhibit B for avoided cost information which corresponds to item (d) in the Rule.

The majority of the differences between the forecasted net savings and the verified net savings are accounted for by the difference between actual and forecasted participation for the programs in 2011, which is discussed above in "Material Variances in Program Costs." Other factors that significantly affected savings estimates, as reflected in the findings of the independent evaluator, include the following:

- The hours of use for Dormitory Housing were revised by ADM from 4,756 to 1,156. To date, a value of 4,756 has been applied, as a catch-all for all University facilities. The revised value of 1,156, as per CA DEER guidelines, has been applied by ADM in its M&V Report.
- Multiple space-types should be applied as needed in larger facilities for lighting retrofits. For example, Industrial facilities may have a Warehouse section.
- The high incremental cost of Energy Star Windows resulted in the program having a TRC below 1. ADM has recommended the removalof thismeasure from the Residential Home Efficiency Program. In 2011, if the costs and benefits from Energy Star Windows were removed from the program, the TRC would have been 1.13.
- The expected savings for Energy Star New Homes fell from 1,947 to 1,450 kWh. This was
  due to the fact that homes built under this program have mostly gas space heating, arelower
  square footage than anticipated, and were evaluated as higher HERS scores than homes in
  similar programs run elsewhere.
- The Commercial Lighting Program is now being focused on customers with <100 kW, which is a more difficult market segment to reach (comprising of small businesses, largely independently owned). ADM has recommended increasing the Net to Gross Ratio (NTGR) for this program from 80% to 90%.
- The independent evaluator recommended changing the SCORE Plus NTGR for lighting from 98% to 75%. Thus far, the types of projects completed through SCORE Plus Program(at least those with the highest savings) have been customer self-directed and referred to CLEAResult by EPE. CLEAResult has not yet completed a high volume of projects generated solely through their on-site Opportunity Assessments.

El Paso Electric is reviewing the recommendations made by ADM for changes to the existing programsand will implement the suggested changes that EPE deems necessary and appropriate.EPE will also request from the Commission changes or modifications to existing programs as recommended by ADM, if those changes are deemed necessary or appropriate.

EPE had retail energy sales of 1,501,716,521 kWh in 2005 (excluding energy sales to the lighting classes of 5,780,980 kWh). This resulted in a statutory goal for 2014 of 75,085,826 kWh of energy savings. In the Order Granting Unopposed Motion in Case No. 11-00047-UT, the commission ordered the exclusion of EPE's military rate class who were taking service under Rate Class 10, Military Research & Development, from participating in energy efficiency programs. The Commission also ruled thatEPE's statutory goals under NMSA 1978, 62-17-5.G are reduced to exclude the sales to EPE's Rate 10 – MR&D customer class from thetotal company sales upon which EPE's savings targets are calculated. This calculation has resulted in a reduction of the statutory goal for 2014 to65,815,596kWh of energy savings.

Table 6: Forecasted Net Savings vs. Verified Net Savings (a)

	Fore	casted Net Savin	igs	Verified Net Savings				
2011 Programs	Annual Energy Savings (kWh)	Energy Energy Savings Savings		Annual Energy Savings (kWh)	Lifetime Energy Savings (kWh)	Peak Demand Reduction (kW)		
Living Wise	558,066	5,134,207	23.7	580,696	5,342,403	22.8		
Residential Home Efficiency	116,142	929,136	28.0	60,093	1,383,207	26.6		
Residential High Efficiency Cooling	1,277,130	19,156,950	607.9	826,354	12,395,316	640.0		

Residential CFL	1,565,552	12,524,412	134.7	1,394,351	11,154,810	180.6
NM Energy Saver	1,284,871	17,357,072	120.1	969,008	7,752,064	95.4
Appliance Recycling	629,259	3,146,295	86.0	572,867	2,864,337	98.8
Energy Star New Homes	428,088	9,846,024	215.4	104,990	3,149,695	87.2
School & Business Assistance	2,829,463	36,783,019	692.3	3,233,661	39,412,147	707.1
Commercial Lighting	9,766,847	117,202,164	875.9	6,884,251	82,611,012	1,759.4
Commercial Cooling, Motors and TES	1,278,149	19,265,231	2,824.5	40,970	409,700	41.1
Commercial Building Envelope	543,719	10,929,208	165.5	61,349	1,286,077	239.7
Commercial Custom Efficiency	0	0	0	0	0	0
Total	20,277,286	252,273,718	5,774.0	14,728,590	167,760,768	3,898.7

<sup>(</sup>a) Forecasted savings are based on the target participation levels for program year 2011 as approved in the Uncontested Stipulation of NMPRC Case No. 11-00047-UT Verified savings are as determined by the independent evaluation performed by ADM.

Table 7: Participation, Utility Costs and Participant Costs By Program

		Utility Costs(c)						
Programs	Number of Program Participants (b)	Incentives (\$)	Admin (\$)	M&V Costs (\$)	Total (\$)	Net Customer Investment		
Living Wise	3,039	131,180	11,330	11,169	153,679	0		
Residential Home Efficiency	89	18,740	3,450	19,998	42,188	187,386		
Residential High Efficiency Cooling	1,071	484,276	26,426	15,130	525,832	205,258		
Residential CFL	12,678	108,751	26,459	0	135,210	0		
NM Energy Saver	4,434	423,840	71,742	7,920	503,502	0		
Appliance Recycling	717	28,358	70,269	4,844	103,471	0		
Energy Star New Homes	134	85,038	90,466	0	175,504	368,173		
School & Business Assistance	27	323,371	223,896	29,568	576,835	180,192		
Commercial Lighting	305	832,710	51,652	37,917	922,279	1,134,612		
Commercial Cooling, Motors and TES	1	13,384	1,975	12,355	27,714	17,846		
Commercial Building Envelope	3	12,374	3,486	7,045	22,905	155,900		
Commercial Custom Efficiency	0	0	0	0	0	0		
General Advertising & Marketing			24,351		24,351			
Total	22,498	2,462,022	605,502	145,946	3,213,470	2,249,367		

Admin=Admin (Direct & Third Party) + Direct Marketing + Program Development.

Incentives=Incentive (Customer & Third Party)

- (b) Program participants are those who participated in program year 2011.
- (c) "Utility Costs: Admin" reflect program costs that were not paid directly to participants. "Utility Costs: Incentives" reflect rebates paid directly to customers. M&V costs are the costs of the independent evaluator's work associated with the given program. Participant costs are the marginal costs to purchase and install the measure before rebates. Net customer investment is the product of the participant costs and the net-to-gross ratio for the program.

Table8: Lifetime kWh & kW Costs, Total Annual Benefits, Total Lifetime Benefits, Average EUL and TRC by Program Categories

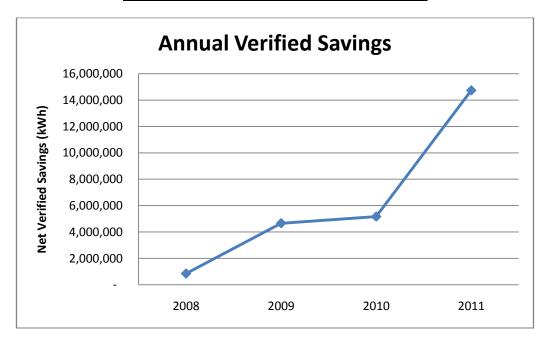
Programs	Total Cost per kWH (Lifetime		VH per kW-yr me (Lifetime		Total Annual Benefits (f)	Total Lifetime Benefits (Present Value)		Approx. Average EUL (years)	TRC
		let) (d) 0.0288		732.64	` ,	\$	(g)	9.2	
Living Wise	\$		\$		25,220		203,335	-	1.32
Residential Home Efficiency	\$	0.0305	\$	68.90	7,994	\$	74,934	23.0	0.38
Residential High Efficiency Cooling	\$	0.0424	\$	54.77	79,260	\$	864,704	15.0	3.50
Residential CFL	\$	0.0121	\$	93.58	48,991	\$	357,009	8.0	3.16
NM Energy Saver	\$	0.0650	\$	659.72	46,178	\$	479,795	8.0	1.41
Appliance Recycling	\$	0.0361	\$	209.46	30,329	\$	137,241	5.0	1.83
Energy Star New Homes	\$	0.0557	\$	67.09	30,575	\$	472,464	30.0	1.01
School & Business Assistance	\$	0.0146	\$	66.93	190,133	\$	1,878,903	12.2	2.48
Commercial Lighting	\$	0.0112	\$	43.68	402,254	\$	3,906,088	12.0	3.41
Commercial Cooling, Motors and TES	\$	0.0676	\$	67.43	4,602	\$	37,099	10.0	1.15
Commercial Building Envelope	\$	0.0178	\$	4.56	19,602	\$	238,088	21.0	1.43
Commercial Custom Efficiency		0		0	0		0	0	
Total Portfolio	\$	0.0192	\$	72.36	885,138	\$	8,649,660	11.4	2.32

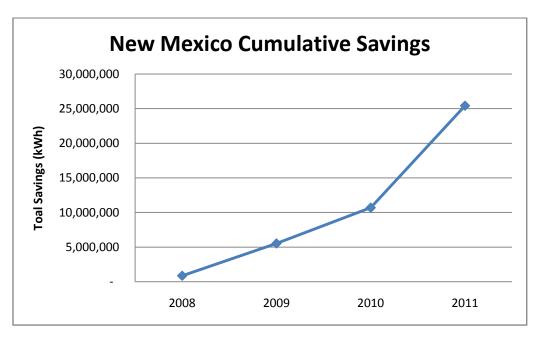
- (d) Please see ExhibitBfor avoided cost information.
- (e) The cost per kWh saved is calculated by dividing the total program costs by the lifetime energy saved. The cost per kW-year is calculated by dividing the total program costs by the product of the verified kW reduction and the approximate average effective useful life (EUL) of measures installed in the program.
- (f) The total annual benefits for each program are the net avoided energy, capacity and gas savings as calculated by ADM.
- (g) The net present value of the total economic benefits was calculated by taking the discounted value of the annual avoided cost times the annual savings over the useful life of each program measure.

EPE is pursuing energy savings opportunities that are cost effective and reasonably achievable in its service area. Thru 2011, EPE has achieved 25,422,338 kWh, or 39% of the 2014 goal. Under EPE's current estimates for Program participation and energy savings including the revisions in Case No. 11-00047-UT, EPE projects that it willachieve its revised goal with the proposed Portfolio of Programs. However, EPE's ability to reach its target for 2014 is dependent on actual customer participation. EPE is continuing to monitor and evaluate existing and potential new Programs and measures and will propose cost-effective and achievable energy efficiency and load management programs and measures that may be available in EPE's service territory, in future Program Plans.

**Table 9: Savings** 

	Net Verified	Cumulative
Year	Savings	Savings
2008	855,912	855,912
2009	4,667,928	5,523,840
2010	5,169,908	10,693,748
2011	14,728,590	25,422,338





## **Non-Energy Benefits**

The following tables show the emission reductions and water savings associated with the portfolio of programs. The annual and lifetime avoided emissions are determined by multiplying the emission rates times the annual and lifetime MWh saved by the portfolio of programs. The water savings are determined by multiplying EPE's average portfolio water consumption per MWh times the annual and lifetime energy savings.

**Table 10: Emission Savings** 

Emission Type	Avoided Electric Emission Rate (lbs/MWH)	Annual Avoided Emissions (tons)	Lifetime Avoided Emissions (tons)
SO2	0.0073	0.0540	0.6151
Nox	1.98	14.59	166.19
CO2	1436.41	10,578.16	120,486.72
Particles	0.0335	0.2467	2.81

**Table 11: Water Savings** 

Water Impact	EPE Portfolio Water Consumption (gal/MWh)	Annual Water Saved (gal)	Lifetime Water Saved (gal)
Water Saved	461.81	6,801,747	77,472,878

## **Self-Direct Programs**

El Paso Electric did not receive any applications for customer self direct programs in 2011.